

September 16, 2009

Todd Tucker  
Town of Frederick  
401 Locust Street  
Frederick, CO 80530

Re: Solar Development at Spindle Hill

Dear Mr. Tucker,

As we discussed recently on the telephone, Invenergy would like to develop a small photovoltaic solar field on the Spindle Hill Energy Center site located on Weld County Road 19 on the east side of Frederick. The Town and Invenergy built a cooperative working relationship during the development and construction of the Spindle Hill Energy Center and Invenergy would like to build on that relationship.

Invenergy has been actively developing and constructing thermal (natural gas) power plants and wind farms across the United States and Canada. Including the Spindle Hill Energy Center, Invenergy has over 4,000 MW of generating assets in operation. In response to increasing interest in solar power, Invenergy has initiated a solar development program and is exploring options to build its first solar facility. We believe the Spindle Hill site has many attractive attributes for our first facility including a good solar resource, proximity to air transportation, existing site infrastructure, and a progressive host community. Our first solar facility will be a small demonstration facility used to evaluate solar plant equipment and refine construction techniques and design practices that can be expanded to larger scale facilities. We expect the demonstration facility to have approximately 400 to 600 kW of generating capacity.

To proceed with the development of this proposed facility, Invenergy would like concurrence from the Town of Frederick staff and board that this will be an acceptable addition to the Town and that the local approval process can proceed quickly. There are three main issues to address with the Town.

## 1) Outlot 3 – Conservation Easement

The Spindle Hill property was originally subdivided into four separate parcels: Lot 1, Lot 2, Lot 3, and Outlot 3. Lot 1 was sold to Xcel for the construction of their interconnection switchyard. Lot 3 was deeded to the Town of Frederick for the future installation of a water tank. Lot 2 (~35 acres) and Outlot 3 (~54 acres) were retained by Invenergy and were used for the Spindle Hill Energy Center. The power generation equipment was installed within Lot 2 as Lot 2 was zoned Industrial by the

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Town Board. Our 230 kV transmission line was installed within Outlot 3 to interconnect the power generation equipment to the Xcel switchyard.

A Deed of Conservation Easement (CE) was granted by Spindle Hill Energy LLC to the Town of Frederick covering the surface use of Outlot 3. The CE was created to preserve the Conservation Values of the Property while allowing Invenergy to install the necessary utilities needed for the Spindle Hill Energy Center. There is land available within Lot 2 for the construction of the solar demonstration facility; however, Invenergy believes the remaining area is best left for high value, combustion turbine additions to the Spindle Hill site. In fact, an expansion option was recently bid to Xcel in their April 2009 All Source Request for Proposals.

Invenergy believes a solar demonstration facility would be consistent with the Conservation Values of the Property. The facility would capture solar energy and convert it to electricity to help reduce the consumption of fossil fuels and would provide educational opportunities for the community about solar energy. If the Town finds our proposal acceptable, an amendment to the Conservation Easement will be required to clarify that solar power generation is an acceptable use within the Conservation Easement.

## 2) Zoning

Outlot 3 is currently zoned agricultural. It is not clear that Frederick's code would permit installation of a solar facility. We believe a photovoltaic solar facility would be acceptable in agricultural zoned areas just as wind turbines or natural resource gathering activities are permissible in many agricultural areas. A photovoltaic solar facility would have no air emissions and virtually no noise emissions. It is Invenergy's expectation that a photovoltaic solar facility could be authorized by special or conditional use without requiring a zoning change. Clarification is required by the Town Board and Staff.

## 3) Site Permit

Invenergy would need to understand the permitting requirements associated with the proposed demonstration facility from a timing and cost perspective. We need to understand the requirements to be placed on the facility by the Town of Frederick to determine the feasibility of the proposed demonstration facility.

At the end of the letter you will find a survey document and an aerial photo showing the locations of Lot 2, Outlot 3, the existing power generation equipment, and the proposed

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locations for the solar facility. Invenergy has targeted two areas within Outlot 3 which are free from oil and gas gathering activities as well as other easements and utilities. The proposed areas are identified as Solar Area 1 and Solar Area 2. Invenergy plans to install one or more solar technologies within these designated areas. Possible technologies to install include: tilted thin film photovoltaic, tracking high efficiency photovoltaic, concentrating photovoltaic with tracking, and concentrating dish thermal. Total land use is expected to be approximately four acres. Example photos of possible solar technologies are also included at the end of this letter.

The electricity from the facility has not yet been sold. Invenergy has several options for the sale of electricity. The most likely power buyer is United Power, followed by Tristate Generation and Xcel Energy. If the Town were interested, since Frederick is a municipal utility we can also discuss selling this renewable power directly to the Town on a wholesale basis. Invenergy can assemble a competitive solar energy supply agreement providing the Town with a long term, fixed price supply of green power.

Our first step is to know whether the Town is interested in hosting this facility. If there are further questions, please contact me at 312-582-1417. I would be happy to schedule a time to meet with the Town staff in Frederick or present the project at an upcoming board meeting. I look forward to working with the Town again on this project.

Sincerely,

**INVENERGY SOLAR DEVELOPMENT LLC**

*Joel Schroeder*

Joel Schroeder

# Proposed Solar Energy Areas

Solar Area #1

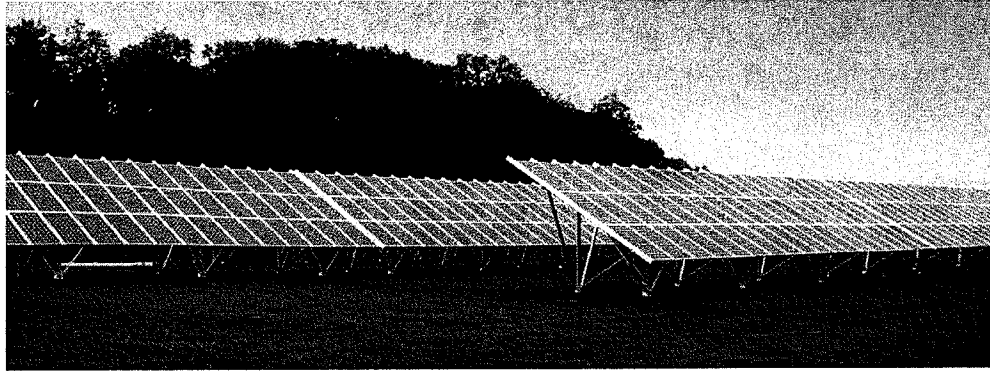
3

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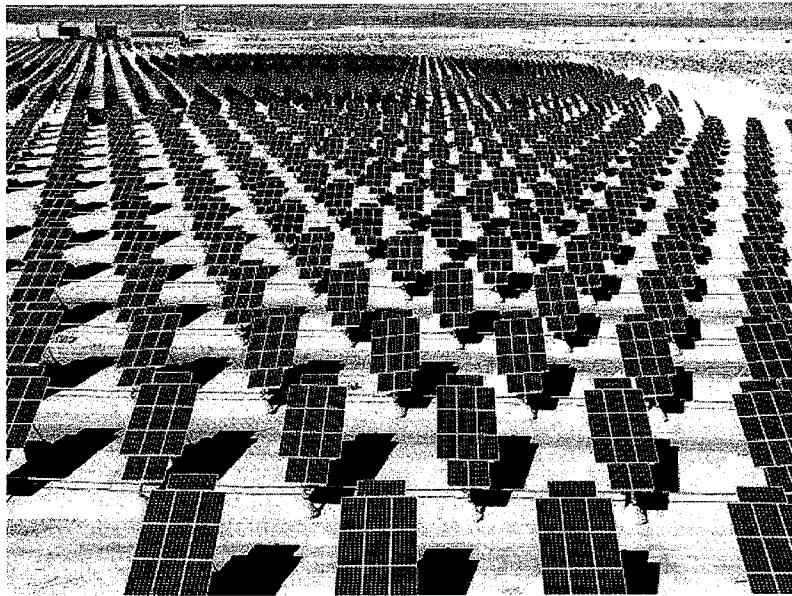
Lot 2

#2

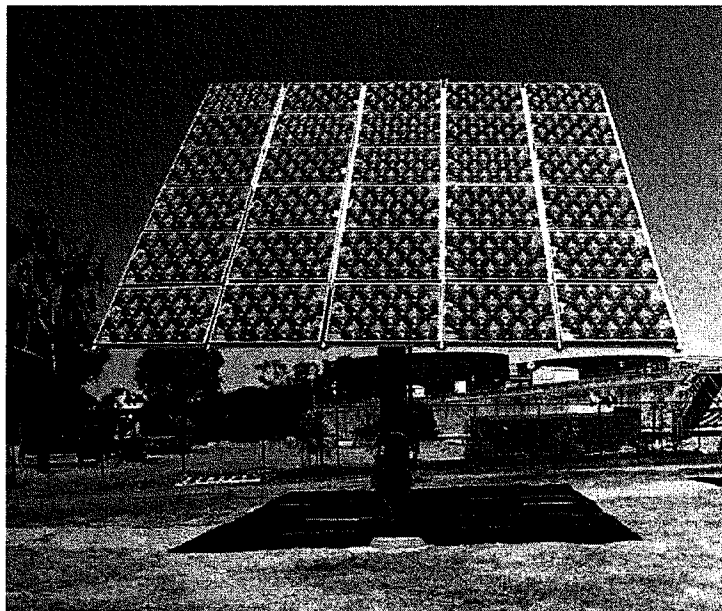




Tilted Thin Film Photovoltaic



Tracking High Efficiency Photovoltaic



Concentrating Photovoltaic



Concentrating Photovoltaic



Concentrating Solar Thermal